

SQL Assessment: INVENTORY MANAGEMENT SYSTEM _10.03.2025

Time Allocated: 3 Hours

Saving Instructions

- Create a folder named SQL_YOURFULLNAME on your computer's desktop and save all your queries in that folder.
- Please make sure to save your work as you work on the questions in the format YOURFULLNAME_SQLQueryRelevantName. Example MbomaNdaba _Question1and2
- At the end, kindly send all your files attached on one email to anyway@ortsa.org.za

Assessment Questions

1. Create a Database

Write a query to create a database called InventoryDB and a query to use it. [2]

2. Create a Items Table

Create a table called Items with the following fields:

- ItemID (Primary Key)
- ItemName
- Category
- Price
- StockQuantity

[2]

3. Insert Item Records

Insert the following data into the Items table:

- (001, 'Desk', 'Furniture', 300.00, 20)
- (002, 'Chair', 'Furniture', 150.00, 50)
- (003, 'Notebook', 'Stationery', 10.00, 100)
- (004, 'Pen', 'Stationery', 2.00, 200)

- (005, 'Monitor', 'Electronics', 250.00, 30) [5]

4. Create a Customers Table

Create a table called Customers with the following fields:

- CustomerID (Primary Key)
- FirstName
- LastName
- Email
- Phone [2]

5. Insert Customer Records

Insert the following customer records into the Customers table:

- (101, 'John', 'Doe', 'john.doe@gmail.com', '123-456-7890')
- (102, 'Jane', 'Smith', 'jane.smith@gmail.com', '234-567-8901')
- (103, 'Emily', 'Davis', 'emily.davis@gmail.com', '345-678-9012') [3]

6. Create an Orders Table

Create a table called Orders with the following fields:

- OrderID (Primary Key)
- CustomerID (Foreign Key)
- OrderDate
- TotalAmount [2]

7. Insert Order Records

Insert the following order records into the Orders table:

- (001, 101, '2024-07-01', 600.00)
- (002, 102, '2024-07-02', 300.00)
- (003, 103, '2024-07-03', 150.00) [5]

8. Create an OrderItems Table

Create a table called OrderItems with the following fields:

- OrderItemID (Primary Key)
- OrderID (Foreign Key)
- ItemID (Foreign Key)
- Quantity
- LineTotal [2]

9. Insert Order Item Records

Insert the following order item records into the OrderItems table:

- (001, 001, 001, 2, 600.00)
- (002, 001, 003, 5, 50.00)
- (003, 002, 002, 2, 300.00)
- (004, 003, 004, 10, 20.00) [5]

10. Best-Selling Item

Write a query to find the best-selling item by total sales amount. Show the ItemName and TotalSalesAmount. [3]

11. Customer with Highest Orders

Write a query to find the customer who has placed the highest total orders. Show the CustomerID, FirstName, LastName, and TotalAmount. [3]

12. Order Summary by Item

Write a query to display the total quantity sold and total revenue for each item. Use GROUP BY to summarize the results. [3]

13. Order Summary by Customer

Write a query to display the total amount spent by each customer. Use GROUP BY to summarize the results. [3]

14. Display All Items

Write a query to display all items showing ItemID, ItemName, and StockQuantity.

[2]

15. Display All Orders

Write a query to display all orders showing OrderID, CustomerID, OrderDate, and TotalAmount.

[2]